

## **MODEL BASED DETECTION AND COMPENSATION OF GLITCHES IN COLOR MEASUREMENT SYSTEMS**

### **ABSTRACT OF THE DISCLOSURE**

5           A color sensor monitors the output of a color producing process and produces  
a signal representative of a color produced by the color producing process. The signal  
can be used as feedback signal to control the process. Occasionally, the color sensor  
signal includes a component representing a transient error. A system model of the  
color producing process is used to predict reasonable sensor signals. A comparison of  
10 the sensor signal with the predicted sensor signals is used to determine if the sensor  
signal is reasonable. If the sensor signal is unreasonable, a substitute signal is used as  
the feedback signal to the control process. The substitute signal can be a predicted  
sensor signal or a signal based on historical system performance data.